

WHAT IS CLAIMED IS:

1. A locking/unlocking mechanism for a cover connected to a body for opening and closing the body, comprising:
 - a cover-side engaging part connected to the cover;
 - a body-side engaging part for locking the cover to the body when engaging the cover-side engaging part;
 - a cover lifting part for pushing the cover-side engaging part in a direction for opening the cover;
 - a manual operating member disposed to the body for controlling the disengagement of the cover-side engaging part from the body-side engaging part for releasing the cover from the locked state; and
 - a locking lever disposed to the body in an arrangement with the body-side engaging part and cover lifting part for sliding and swinging the locking lever in a given sequence in response to movement of the manual operating member such that the locking lever slides in response to movement of the manual operating member to a first operating position from a locked position in which the body-side engaging part engages the cover-side engaging part wherein when the manual operating member is moved to the first operating position the locking lever is retracted a specific distance to a control position and the cover is unlocked; and
 - swings in response to movement of the manual operating member to a second operating position into an uplifted position to cause the cover lifting part to lift the cover-side engaging part up a specific distance for opening the cover.
2. The locking/unlocking mechanism of claim 1, further comprising:
 - a lever urging means for urging the locking lever to the locked position; and
 - a return urging means for urging the return of the manual operating member to an initial position

3. The locking/unlocking mechanism of claim 1, further comprising:
a swing arm for converting movement of the manual operating member operated toward the first operating position to the sliding action of the locking lever.

4. The locking/unlocking mechanism of claim 3, further comprising:
first and second guide pins; and
first and second guide holes formed in the locking lever extending in the sliding direction;

wherein the first guide pin is mounted in the first guide hole, and the second guide pin is mounted in the second guide hole with the first and second guide pins controlling the sliding movement of the locking lever.

5. The locking/unlocking mechanism of claim 4, wherein:
the body-side engaging part, cover lifting part, and second guide hole are formed at a place on one side of the first guide hole in the locking lever;

a link pin for linking to the swing arm, and a contact part for contacting the manual operating member when the manual operating member is moved from the first operating position into or toward the second operating position;

a curved guide hole extending from the locked-position side of the second guide hole such that the curved guide hole is centered on the first guide pin when the first guide pin is positioned at the end on the locked-position side of the first guide hole; and

a curved pin guide hole into which the link pin is slidably inserted to enable the curved pin guide hole to become centered on the first guide pin when the first guide pin is positioned at the end on the locked-position side of the first guide hole.

6. The locking/unlocking mechanism of claim 3, further comprising:
a first guide pin disposed in the body or in the locking lever;
a second guide pin disposed in the body or in the locking lever;
a first guide hole extending in the sliding direction in the body or in the locking lever based upon the opposed disposition of the first guide pin in the body or locking lever; and

a second guide hole extending in the sliding direction in the body or in the locking lever based upon the opposed disposition of the second guide pin in the body or locking lever;

wherein the first guide pin is inserted slidably in the first guide hole, and the second guide pin is inserted slidably in the second guide hole.

7. The locking/unlocking mechanism of claim 6, wherein:

the body-side engaging part, cover lifting part, and second guide pin or second guide hole are rendered to a part on one side of the first guide pin or the first guide hole of the locking lever;

a contact part positioned relative to the manual operating member to make contact therewith when the manual operating member is moved between the first operating position and second operating position with said contact part being formed at a place on another side of the first guide pin or first guide hole of the locking lever;

a curved guide hole extending from the locked-position side of the second guide hole and with the curved guide hole centered on the first guide pin when the first guide pin is at the end of the first guide hole where said pin is positioned when the first guide hole is in the locked position;

a link pin for linking to the locking lever or to the swing arm; and

a curved pin guide hole in which the link pin is slidably inserted to enable the locking lever or swing arm to cause the curved pin guide hole to become centered on the first guide pin when the first guide pin is at the end of the first guide hole and when the first guide hole is in the locked position.

8. The locking/unlocking mechanism of claim 1, wherein:

the locking lever comprises a guide face for contacting the cover-side engaging part as the cover-side engaging part moves toward the closed position

thereby enabling the locking lever to slide from the locked position toward the unlocked position when force is applied from the cover-side engaging part to said guide face.

9. The locking/unlocking mechanism of claim 1, wherein:
the sliding direction of the body-side engaging part of the locking lever is substantially perpendicular to a tangent to the curved path of the cover-side engaging part drawn through the position where the body-side engaging part engages the cover-side engaging part.

10. The locking/unlocking mechanism of claim 1, wherein:
the body is a printer case for a printer.

11. The locking/unlocking mechanism of claim 10 wherein the cover has a distal end part and wherein the printer comprises:

a paper feed roller assembled to the distal end part of the cover having a paper feed roller shaft;

a print head assembled in the printer case ;

with said cover-side engaging part being aligned coaxially with said paper feed roller shaft; and

wherein said paper feed roller is adapted to convey a recording medium past a printing station in said printer when the cover is closed.

12. The locking/unlocking mechanism of claim 11, wherein the printer further comprises:

a recording paper roll compartment formed in the printer case; and

an opening in the printer case which is opened and closed by said cover with said opening providing access to said recording paper roll compartment when the cover is opened.

13. A printer having a printer case, a cover for closing and opening a compartment in the printer case in which a recording medium is adapted to be stored, a feed roller for moving the recording medium along a paper path in the compartment, means for printing to the recording medium when the cover is closed and a

locking/unlocking mechanism for the cover wherein said locking/unlocking mechanism comprises:

- a cover-side engaging part connected to the cover;

- a body-side engaging part for locking the cover to the case of the printer when engaging the cover-side engaging part;

- a cover lifting part for pushing the cover-side engaging part in a direction for opening the cover;

- a manual operating member for controlling the disengagement of the cover-side engaging part from the body-side engaging part to release the cover from the locked state; and

- a locking lever in an arrangement with the body-side engaging part and cover lifting part for sliding and swinging in a given sequence in response to movement of the manual operating member such that the locking lever slides in response to movement of the manual operating member to a first operating position for retracting the locking lever a specific distance from the locked position and for disengaging the cover from the case and

- swings in response to movement of the manual operating member to a second operating position into an uplifted position to cause the cover lifting part to lift the cover-side engaging part up a specific distance for opening the cover.

14. The printer of claim 13, further comprising a print head wherein:

- the paper feed roller is assembled to the cover such that the paper feed roller contacts the print head when the cover closes;

- and

- an urging member for pressing the print head to the paper feed roller when the cover is in the closed position.